EDWARD F. SCHOLLS

IBLA 87-642 Decided May 25, 1989

Appeal from a decision of the Eastern States Office, Bureau of Land Management, rejecting simultaneous oil and gas lease offer ES-32559 (Ala.).

Affirmed.

1. Oil and Gas Leases: Applications: Simultaneous--Oil and Gas Leases: Known Geologic Structure--Oil and Gas Leases: Noncompetitive Leases

   The Secretary of the Interior lacks authority under the Mineral Leasing Act to issue a noncompetitive oil and gas lease for lands found to be within a known geologic structure of a producing oil or gas field subsequent to filing of the lease offer and prior to lease issuance. A noncompetitive lease offer for such lands must be rejected notwithstanding the lands were not known to be in a known geologic structure at the time the offer was filed.

2. Oil and Gas Leases: Known Geologic Structure

   A determination that lands are within a known geologic structure of a producing oil or gas field will be sustained on appeal where the record shows lands are underlain by a formation determined to be productive elsewhere in the area, and where appellant fails to establish by a preponderance of the evidence that the designation is in error.

APPEARANCES: Dale E. Zimmerman, Esq., McDade Warran & Zimmerman, Washington, D.C., for appellant; Mary Katherine Ishee, Esq., Office of the Solicitor, U.S. Department of the Interior, Washington, D.C., for the Bureau of Land Management.

OPINION BY ADMINISTRATIVE JUDGE ARNESS

Edward F. Scholls has appealed from a decision dated June 16, 1987, by the Eastern States Office, Bureau of Land Management (BLM), rejecting simultaneous oil and gas lease offer ES-32559 Ala. because the lands embraced within the offer were determined to be within the Mary Ann Field Known Geologic Structure (KGS). The lease contains 118 acres of land embracing the W\ NW^ sec. 25, and SE^ NE^ sec. 26, T. 9 S., R. 1 E., St. Stephens Meridian, in Baldwin County, Alabama.

Scholls' application was originally drawn with first priority for parcel No. ES-102 in the May 1983 simultaneous oil and gas lease drawing. By decision dated October 10, 1984, BLM determined the lease offer was unacceptable pursuant to 43 CFR 3112.3(a)(2) noting "the application's identification numbers for Part A (466-38-2583) and Part B (466-38-3583) were mismatched." Scholls appealed to this Board, which reversed the BLM decision and directed issuance of a lease, all else being regular. Edward F. Scholls, 93 IBLA 138 (1986).

Thereafter, when the lands were submitted for KGS clearance as required prior to issuance of a noncompetitive lease, the tract was found to be within the extension of the Lower Mobile Bay-Mary Ann Field KGS by the Jackson District Office, BLM. This finding prompted the Eastern States Office decision presently before the Board on appeal.

In his statement of reasons (SOR) Scholls argues that he has been unduly penalized by BLM's failure to timely act on his application. He asserts that BLM has unreasonably delayed action on the lease application which he initiated in May 1983 and which has been awaiting action "nearly a thousand days [only] to be * * * once more rejected" (SOR at 4). Scholls takes exception to the definition of a "trap" appearing in BLM Instruction Memorandum (IM) No. 87-122 (Nov. 14, 1986), cited in the BLM KGS report extending the KGS. He criticizes the KGS report, stating, "[w]hile, as the Instruction Memorandum recognizes, a degree of geologic inference is a necessary ingredient in any determination of what constitutes the presumptively productive area of a trap, the KGS report in the present case has taken geologic inference impermissibly far" (SOR at 10).

The SOR takes the position that the KGS report fails to qualify as an expert opinion because it appears that it stretches to reach a desired result: "the result here was to extend a known geologic structure by 13,750 acres in order to capture the one tract of 118 federally owned acres within that area" (SOR at 11). Scholls also points out that the principal foundation of the KGS report was a presentation made by First Energy Corporation to the Alabama State Oil and Gas Board requesting approval of a 5,000-acre drilling and producing unit which included the KGS extension. This proposal was opposed by other parties and ultimately rejected by the State board (SOR at 11-12).

Further, Scholls asserts that the KGS report ignored the only "truly relevant geologic development" in the area consisting of data from the drilling of a dry hole by Exxon on State lease No. 620, drilled to a depth of 21,758 feet approximately 4,500 feet south of the subject tract. He argues that BLM has not presented a prima facie case for KGS extension and submits a report from his own geological consultant, James A. Smith, dated August 28, 1987, reviewing the KGS report and geologic data for the area, which concludes that BLM's interpretation is unjustified (Exh. "C" to SOR at 11-12).

In answer to the SOR, BLM asserts that delays in processing a lease for whatever reason, do not create a right to a lease. BLM maintains this is so even if the KGS determination probably would not have been applied to the lands but for the delay in lease issuance. In this instance BLM points out

that the Jackson District Office does not generally have on hand information about the geology of all Federal tracts in the Southeastern United States which the State Office has offered for lease. The District office does not become aware of tracts offered until clearlisting is requested, and where an area shows production or production potential, further research is required (BLM Response at 2-4).

BLM explains that when the request for clearance of appellant's lease application was received, available data showed the lands to be located in a highly productive and competitive area of both onshore and offshore leasing. BLM states:

> State leases on adjacent blocks were bringing in bonus bids ranging from approximately $4,000 to $10,000 per acre. Two nearby wells in Block 95, the Mobil 95-1 and Mobil 95-2, which are currently shut in and capable of production, establish production potential in the vicinity. The Mobile 95-1 was tested at a rate of 10.5 million cubic feet of gas per day on August 22, 1982. See KGS Report at 2.
>
> The District Office determined, on the basis of seismic studies done by First Energy Corporation and Crutcher-Tufts corporation (which were presented before the State Oil and [G]as Board at a hearing concerning First Energy's Request for a 5,000 acre drilling unit, which request was opposed by Crutcher-Tufts), as well as confidential seismic interpretations provided by the Minerals Management Service, that there is nothing to block extension of the producing sand from under the Mobil Wells to under the Federal Tract in block 96. * * * The Top Norphlet Structure Map drawn by the District Office * * * based on two maps provided to the State Oil and Gas Board by First Energy Corporation shows a fault separating block 95 and 96.

(BLM Response at 4-5).

BLM denies the significance attributed by Scholls to the abandoned Exxon well on State lease 620, and concludes that the lack of production from the well does not disprove the production potential of the Federal tract stating:

> [T]he Exxon well is separated from the federal tract by a fault (See Memorandum attachment 2). If this fault is a "sealing" fault (one which would block the flow of hydrocarbons) it would mean that the Exxon well and the federal well are not part of a continuous trapping structure, and therefore lack of production from the Exxon well would not impact the federal tract. Even if this is not a "sealing" fault both the area from which the Mobil wells are producing, and the federal parcel, are structurally high, while the Exxon well is structurally low. Since gas rises, a structurally high area is more likely to contain gas deposits than a structurally low area. Thus, lack of production from the Exxon well does not disprove the production potential of the federal tract.

(BLM Response at 6).

[1] The Secretary of the Interior, and his delegated representatives, lack authority under section 17 of the Mineral Leasing Act, as amended, 30 U.S.C. | 226 (1982), to issue a noncompetitive oil and gas lease for land which has been determined to be within a KGS. McDonald v. Clark, 771 F.2d 460 (10th Cir. 1985); McDade v. Morton, 353 F. Supp. 1006 (D.D.C. 1973), aff'd, 494 F.2d 1156 (D.C. Cir. 1974). 1/ Land within a KGS may only be leased by competitive bidding, in accordance with the regulations in 43 CFR Subpart 3120. Thus, the Department is obligated to ensure that no noncompetitive lease issue if the land sought is found to be within a KGS at any time prior to lease issuance. Kathleen M. Blake, 96 IBLA 61 (1987); Carolyn J. McCutchin, 93 IBLA 134 (1986). The Department has also provided by regulation that a noncompetitive oil and gas lease offer filed by an applicant drawn with first priority "shall be rejected in whole or in part as may be appropriate" if, "prior to the time a lease is issued, all or part of the lands in the offer are determined to be within a [KGS]." 43 CFR 3112.5-2(b).

Contrary to appellant's arguments, the delay in this case, no matter how long or unreasonable, cannot entitle him to a lease if the KGS extension is upheld. It is a well-established principle that delay in the processing of a noncompetitive lease application does not vest any legal or equitable interest or right to a lease where, during the processing of the offer, the land becomes unavailable because it is included within a KGS. There is no time limit on BLM's decision to either reject a lease offer or issue a lease. Justheim Petroleum Co. v. Department of Interior, 769 F.2d 668 (10th Cir. 1985); see also Angelina Holly Corp. v. Clark, 587 F. Supp. 1152 (D.D.C. 1984); Kathleen M. Blake, supra; Hrubetz Oil Co., 93 IBLA 343 (1986).

A KGS is defined by the Department as the "trap in which an accumulation of oil or gas has been discovered by drilling and determined to be productive, the limits of which include all acreage that is presumptively productive." 43 CFR 3100.0-5(1). While there must be a determination that a structural or stratigraphic trap contains oil or gas, usually by completion of a producing well, the limits of a KGS are not simply the immediate area around the well or land itself determined to be productive, but all land where geologic or other evidence indicates there is a reasonable probability the land is underlain by a trap or series of related traps in the same formation. Celeste C. Grynberg, 96 IBLA 87 (1987); B.K. Killion, 90 IBLA 378 (1986); Angelina Holly Corp., 70 IBLA 294 (1983), aff'd, Angelina Holly Corp. v. Clark, 587 F. Supp. 1152 (D.D.C. 1984). Such additional land is considered to be "presumptively productive," and is properly included in the KGS. Lloyd Chemical Sales, Inc., 82 IBLA 182 (1984).

1/ Section 17 of the Mineral Leasing Act has recently been amended by section 5102(a) of the Federal Onshore Oil and Gas Leasing Reform Act of 1987 (FOOGLRA), P.L. 100-203, 101 Stat. 1330-256, to require that all available lands be initially posted for leasing by competitive bidding. Nonetheless, section 5106(a) of FOOGLRA authorized the processing of pending noncompetitive lease offers under prior law. 101 Stat. 1330-259.

[2] An appellant challenging a Departmental determination that land is within a KGS of a producing oil or gas field has the burden of showing that the determination is in error by a preponderance of the evidence. Bender v. Clark, 744 F.2d 1424 (10th Cir. 1984); Carolyn J. McCutchin, 99 IBLA 29 (1987). BLM's extension of the Lower Mobile Bay-Mary Ann Field KGS is discussed in a report dated February 27, 1987, by geologist W.C. Lucas, which concludes that it can reasonably be inferred that a producing or presumptively productive zone extends under the KGS in question. The report summarizes the area geology as follows:

> In the study area, the Jurassic sediments are over 4,000 feet thick with the Smackover & Norphlet having the greatest potential for hydrocarbon production. Norphlet hydrocarbon potential in southwestern and offshore Alabama is excellent, with petroleum traps being primarily structural traps involving salt anticlines, faulted salt anticlines, and extensional fault traps associated with salt movement. Reservoir rocks consist primarily of quartz-rich eolian, wadi, and marine sandstones having principally secondary (dissolution) porosity with some intergranular porosity. Porosity of the Norphlet reservoirs range from 8 to 25 percent with an average of 12 percent. The permeability of the Norphlet reservoirs in offshore Alabama average 1.1 millidarcies.
>
> The 1979 discovery of significant quantities of gas in Norphlet sandstones at the Lower Mobile-Bay Mary Ann Field first demonstrated the potential of this formation in offshore Alabama. There are today six gas fields in the area: West Dauphin Island Field, Northwest Gulf Field, Bon Secour Bay Field, Lower Mobile Bay-Mary Ann Field, Fairway Field, and North Central Gulf Field. Nearby production in the Lower Mobile Bay-Mary Ann Field (Alabama Block 95-1) was tested at a rate of 10.5 million cubic feet of gas per day on August 22, 1982. This test was made through a 30/64 inch choke with a flowing tubing pressure of 2.578 PSIG. The Alabama State Oil and Gas Board in its Oil & Gas Report 13 indicates that the total recoverable proven and potential reserves of natural gas will range from 8.12 to 4.93 trillion cubic feet gas in the Alabama coastal waters.

(Geologist's (W.C. Lucas) Report at 2).

Pertinent to the KGS issue before us the report states:

> The KGS is an extension of a deep gas trend that is present in the Lower Mobile Bay-Mary Ann Field in Blocks 76, 77, 94, & 95. The proposed Lower Mobile Bay-Mary Ann Field KGS Extension is located on a faulted salt anticline near the west end of the Fort Morgan Peninsula. This interpretation is based on a positive inference from seismic interpretations made by various geophysicists with oil and gas companies in testimonies given in hearings before the Alabama Oil and Gas Board and consultation with MMS geophysicists. It is further supported by an analysis of geologic data and the production test history of wells in the

> Alabama Coastal Waters area. A major fault is interpreted to be located along the north and west sides of the KGS extension. A possible minor fault traverses the KGS (Figure 2) area; however, it does not appear to isolate or segregate hydrocarbons that are presumptively present in the proposed KGS Extension.

(Lucas Report at 3).

Scholls makes much of the fact that First Energy Corporation failed in its effort to obtain the approval of the 5,000-acre drilling and producing unit by the State Board. He states that the structure map of the KGS report and that used by First Energy were similar (SOR at 8). He concludes that this denial by the State Board dictates that the KGS extension relying on similar geologic and geophysical criteria also fail.

However, this result does not necessarily follow where the critical factor in determining the size of a drilling unit is not whether or not a presumptively productive trap exists under the area. BLM advances a counter argument, that the criteria for determining the size of a drilling unit and for determining a KGS are different, stating:

> The 5,000-acre unit proposed by First Energy was presented with the objective to efficiently and economically drain hydrocarbons from the Norphlet formation. The Alabama Oil and Gas Board's position is that without geology and engineering data from a well drilled in the proposed 5,000-acre unit and because of the lack of seismic lines across the area, that "evidence available is insufficient to justify the establishment of petitioner's proposed 5,000-acre drilling and production unit and the creation of such a unit will not prevent waste" (State Oil and Gas Board Decision; IN RE: Order #86-40, Docket #12-19-859A, page 5, Feb. 28, 1986). The State Oil and Gas Board's rejection of the proposed 5,000-acre drilling unit does not imply that a "production and/or presumptively productive trap" does not exist under the parcel in question.

(Geologist's (Robert Finney) Report dated Jan. 8, 1988, attached to BLM Answer at 2).

Scholls' geologist, James A. Smith, criticizes BLM's interpretation of the Norphlet trap in this KGS extension by disagreeing with the inferred structural interpretation of the NE^ of block 96 and the N\ of block 97 (designated Figure 2 in the BLM Report). He points out this interpretation closely follows the First Energy interpretation presented to and rejected by the Alabama Oil and Gas Board. He reviews the testimony and exhibits presented before the Alabama board and concludes there is no technical or evidentiary support for the alleged east-west trapping fault as shown on First Energy's exhibits (Smith Report at 2-3). He states that the evidence indicated that "most of the seismically interpreted faults tend to be somewhat discontinuous and arcuate in the Mary Ann Field area." He suggests that "any regional fault trend would have to be interpreted as northwest-southeast." He points out that both Exxon's and Mobil's interpretations

suggest the fault dies out to the Southeast as it leaves the area in the direction of the peninsula and the area of no control (Smith Report at 3).

Geologist Smith presents alternate interpretations that "represent this author's projections of more likely structural inferences in the no-data area." He finds the Exxon dry hole

> is the most significant geological control in the vicinity. The fact that the Exxon well was drilled at its selected location would indicate that some evidence of north dip or perhaps the tail end of a typically small, arcuate fault was present to complete what was believed to be an effective trap. The fact that the well was dry suggests that any inferred trapping mechanism north of the well was either missing or very subtle. A large regional fault as portrayed by First Energy would, in all probability, have generated considerable north dip and would have strengthened the potential trapping mechanism.

(Smith Report at 4).

Smith presents four possible interpretations using the concept that a "southeast plunging nose or ridge has been extended into the area of interest with slight variations in each case." He indicates that he is "inclined" towards two of these variations as the "most likely interpretations." However, he concludes in each case, the results appear to favor a lack of positive structuring in a southwest-northeast direction across blocks 96 and 97 (Smith Report at 4-5).

BLM relies on evidence from the Alabama hearing to show the opposite result, that a continuous entrapping structure can be assumed to exist under block 95, where the Mobil wells 95-1 and 95-2 are located, which runs from block 96 to the Federal tract in question. BLM responds that the First Energy map shows a fault separating block 95 from block 96 and that the low area on the Crutcher-Tufts map is of insufficient depth to prevent the gas in the two blocks from being connected. BLM states:

> Production potential under the federal tracts is indicated by Mobil's Norphlet Net Pay Isopach Map (Memorandum attachment 7) which shows a highly productive net pay thickness of 100 feet extending in an east west direction. Should this trend continue, a producible gas sand should exist under the federal tract. The Mobil Structural Cross Section, Memorandum, attachment 6, shows "tight" zones (areas of low porosity, an indication of low production potential since as a general rule, high porosity or permeability is necessary to effectively produce the gas) beneath the Mobil 95-1 and Mobil 95-2 wells. This "tight" zone, however, decreases in an east/west direction, toward the federal tracts, disappearing beyond the Mobil 95-well. This trend would indicate very little "tight" zone under the applied for federal tract, and thus high porosity and high production potential. See Memorandum at 4.

(BLM Answer at 5-6).

Similarly, BLM emphasizes that testimony of expert witnesses from Exxon, First Energy, and Crutcher-Tufts was favorable to the KGS extension because they testified the drilling unit was a production area or an area having the potential for production. Testimony at the Alabama hearing indicated the First Energy location was higher than the Exxon well located in block 97 and separated from it by a fault (Finney Report, Jan. 8, 1988, at 2 and 4).

We find BLM's determination that the Federal parcel is properly within a KGS is reasonable. Scholls has failed to meet his burden to establish by a preponderance of the evidence that there is no reasonable probability that a producing structure underlies the tract in question. At most, he has offered a separate interpretation of the same geological evidence relied upon by BLM. Such a divergence in opinion is insufficient to demonstrate a showing of error in BLM's conclusion. Celeste C. Grynberg, 105 IBLA 361, 367 (1988); see also Kathleen M. Blake, supra at 69.

Scholls' expert offers not one but several possible interpretations and then concludes he is "inclined" to favor one such alternative over another. In the face of such ambiguous evidence the Secretary is entitled to rely on the reasoned opinion of his technical expert in the field, where such opinion is supported by competent evidence. Ralph E. Peterson, 94 IBLA 340 (1986). While geologist Smith's evaluations and disagreements with BLM appear reasonable, they fall short of the proof necessary to overturn the BLM KGS determination. L.M. Grace, Jr., 105 IBLA 166, 170 (1988).

Finally, Scholls relies on information provided from the abandoned Exxon well on State lease 620. However, BLM has shown why the information from this well is not so conclusive as to condemn the KGS of the adjacent area. The fact that a "dry hole" is found within an area included in a KGS does not automatically establish error in that KGS. The presence of a dry hole, alone, does not mean that the overall area is not presumptively productive of oil and gas where the majority of the area is underlain by a producing formation. This is so because, given varying geologic conditions such as porosity, there are inevitably instances where no production is found. Celeste C. Grynberg, supra at 366; Carol Ann Hoffman, 100 IBLA 139, 141 (1987).

Therefore, pursuant to the authority delegated to the Board of Land Appeals by the Secretary of the Interior, 43 CFR 4.1, the decision appealed from is affirmed.

Franklin D. Arness
Administrative Judge

I concur:

Anita Vogt
Administrative Judge
Alternate Member